



Music and ... Reading

Full Research Booklet

Ages 3 to 5 years old



Kindermusik Classes – On the Path to Reading (“Imagine That”)

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INTRODUCTION

We know this: throughout our lives—and our children’s too—music accompanies our growth. From a mother’s heartbeatⁱ to a sweet nursery song, the gleeful sounds of “The Wheels on the Bus” to a raucous “Take Me Out to the Ballgame,” the songs and sounds in our lives becomes associated with events, people, and emotions.

We also know this: together, music and the brain can make magic. In fact, as scientists increasingly turn their attention to the quantifiable effects that early music education can have on a child’s development, the results of their research have been consistent and mind-blowing: specifically, that music can have a dramatic effect on a child’s overall readiness for school in ways we never even dared to expect.

One of the most exciting research revelations is that early music experiences can a significant impact on literacy and reading. According to experts, learning to read depends on acquiring a variety of skills—including phonological processing, oral language, and comprehension.ⁱⁱ So, when it comes to these literacy-boosting skills . . . how does Kindermusik fit in?

PHONOLOGICAL AWARENESS

What Is It?

A phoneme is a speech sound—the smallest bit of sound that distinguishes one word from another. For example, with the change of one sound, *cat* becomes *bat* or *mat* becomes *mad*. With some instruction and practice during the preschool years, children can begin to develop an awareness of phonemes—or the ability to recognize that words can be divided into individual sounds. They can learn to distinguish one word from another word, recognize the “beats” that we call syllables, and even begin to hear individual phonemes within words (e.g., Sam’s name starts with the sound /s/). This is called phonological awareness. According to researchers, a child’s level of phonemic awareness upon entering school may be the single best predictor of the success he or she will experience in learning to read.ⁱⁱⁱ

How It Works in a Kindermusik Class

Ready for the amazing part? Young children with musical experience perform better on measures of phonological awareness than those without it.^{iv} In scientific trials, playing musical instruments and taking music classes like Kindermusik improved young children’s brains’ abilities to process spoken speech sounds.^v

Why? Well, if you think about it, spoken language and music are each made up of series of sounds strung together to create something bigger. (Combine spoken sounds to make words. Combine tones to make music.) Researchers have theorized that learning to distinguish the sounds within music is a skill that transfers to the sounds of language, and brain scan studies have proven this to be true.

So, congratulations. If your child is enrolled in Kindermusik, you're on the right track! New nationwide guidelines recommend that building phonological awareness should begin even earlier than kindergarten—in preschool^{vi}—and educational researchers recommend using the very tools for which Kindermusik is so famous—singing songs,^{vii} playing with the sounds in words,^{viii} and listening to, repeating, and predicting rhymes—to foster children's awareness of speech sounds. Believe it or not, there is even a strong link between children's knowledge of nursery rhymes at age three and success in reading and spelling as children enter school.^{ix}

What You Can Do at Home

- **Name Game.** How many words (real or silly) can you think of that rhyme with your names?
- **Sound Matching.** Think of an item or animal such as a butterfly, piano, guitar, or dog—and identify the first sound in the word (e.g., /b/ at the beginning of butterfly). Then look around the house, yard, or neighborhood to find other things that share that initial sound.
- **Alphabet Album.** Grab 13 pieces of paper, fold them over, and staple them to make a 26-page “alphabet book.” Write one letter on each page. Then find pictures in magazines, cut them out, and glue or tape each of them to the page of the letter it begins with! Some letters may be a challenge, so be creative and keep looking...or draw your own pictures.

Developmental Milestones: Phonological Awareness

By the time your child enters kindergarten, he or she will probably be able to^x:

- Divide short sentences into individual words.
- Point to the picture (“hat”) for a word that rhymes with a spoken word (/cat/).
- Fill in the rhyming words of known nursery rhymes.
- Isolate the first sound of some simple spoken words (/sss/ in “sun”).
- Name the sounds that correspond with about 8 different letters.

NOTE: Every child is unique, and different children may reach milestones at different times. If you're concerned about your child's development, talk to your pediatrician.

ORAL LANGUAGE: LISTENING, SPEAKING, AND VOCABULARY

What Is It?

Did you know that your child will soon be spending up to 75% of his or her classroom time learning through listening?^{xi} The importance of being a good listener—a *skilled* listener—can hardly be overrated in today’s culture. The ability to listen skillfully, in fact, provides a foundation for all aspects of reading and language development—but according to experts, while skillful listening requires *explicit instruction*^{xii}, it’s something not frequently taught in elementary grade classrooms.^{xiii}

Fortunately, research shows that experiences with music “light up” your child’s brain, including the areas used in processing language.^{xiv} In a study of children ages four to six, music training was proven to improve brain functioning related to listening. Amazingly enough, after only seven weeks of music classes, brain scans showed frequencies associated with increased cognitive processing.^{xv}

The good news doesn’t stop at listening, either. Researchers believe that by providing a playful and safe way for children to *vocalize* and *communicate* through singing, rhyming, and vocal play activities, music experiences also contribute to the development of young children’s language skills, including speaking, vocabulary/comprehension, confidence, and expressiveness and comfort with multiple forms of self-expression.^{xvi}

Research shows that the sheer quantity of words a child knows at age three is one of the most reliable predictors of what his or her reading ability will be in third grade.^{xvii} Not surprisingly, songs and stories are absolute treasure troves of new words, and hearing new vocabulary read or sung aloud is the best way for young brains to put new words into context^{xviii}.

How It Works in a Kindermusik Class

Whether discovered in stories, songs, or just out of the blue, the meanings of new vocabulary words are always far more likely to “last” when given a physical or memory “tag” of some sort—like a rhyme, like an associated movement, like all the things children do when they listen, speak, and sing in a Kindermusik class.^{xix} (Wanna *really* make it stick? Parent involvement is the next best key to children’s absorption and retention of new information like new vocabulary words.^{xx})

What You Can Do at Home

- Fill in the _____. Your child’s memory and prediction skills may still surprise you from time to time! Try a fill-in-the-missing-word game with a familiar song or rhyme—either by turning down the music or by simply pausing as you recite, sing, or read.
- **Pretzels for Sale!** Pretend you are a carnival announcer or street vendor selling pretzels. Speak or sing the words “Pretzels for sale! Pretzels for sale! Come and buy my pretzels!” in various styles: whispering, booming, slowly, quickly, quavering, in a monotone, etc.

- **Out and About.** When out for a drive or a walk in your community, play a game of telling who or what is out and about. For example, you might say, “I see a bicyclist out and about. He’s wearing a yellow shirt and a purple helmet. What do you see?”

**Developmental Milestones:
Oral Language**

By the time your child enters kindergarten, he or she will likely be able to^{xxi}:

- Listen to and follow directions with more than two steps (“Put the brush in the tray, wipe the table, and wash your hands.”).
- Initiate and/or extend conversations for at least four exchanges (e.g., when talking with a friend, ask questions about what happened, what friend did, and share own ideas).
- Ask and answer questions with plenty of details.
- Resolve disputes with peers using spoken words.
- Use at least 1,500 words in spoken vocabulary.
- Understand close to 6,000 spoken words, and respond to nearly 25,000.
- Show a love of big and new words about favorite topics (e.g. dinosaurs).

COMPREHENSION

What Is It?

For a child, all the work he or she has put into learning to decipher the code that makes up written words finally pays off when he or she finally gets a joke hidden in the words of a book, or when he or she has the “aha” moment that the squiggly lines on his bedroom door spell his or her name. The whole point of bothering to learn to read, of course, is to understand the meaning of written words, which experts call comprehension.^{xxii}

Now try this on for size: Researchers have found that children who participate in music instruction are also more likely to score higher on tests of reading comprehension. A meta-analysis of 25 studies, some involving more than 500,000 students, found a “strong and reliable association” between music instruction and reading comprehension test scores.^{xxiii} (Huh? Why would children with music experience do better at understanding written words?) Well, partly

because of music's proven impact on phonological awareness, as discussed in an earlier section. And partly because of music's proven impact on vocabulary learning and memory, as discussed in another section. And partly because of music's ties to listening skills or expressiveness, as discussed in yet another . . . get the idea?

If you're not already blown away by the breadth of the research indicating wide-ranging impact of music experiences on all kinds of developmental assets of young children, here's another one: Music instruction has a proven impact on verbal memory.^{xxiv} As elementary-aged children read ever longer sentences, they need to hold many words in short-term memory while they put the meaning of the whole sentence together. Having a good verbal memory means that a child doesn't forget the start of the sentence by the time he or she gets to the end of the sentence. In a study of children ages six to fifteen, those who had music training had significantly better verbal learning and retention abilities. No kidding. And the longer the training, the better the verbal memory.^{xxv}

How It Works in a Kindermusik Class

Imagine a Kindermusik educator sitting on the floor, a circle of small children around her. She's reading a book aloud—or better yet, singing a musical story. The layers of learning going on in this scenario are staggering. The children around her are coming to understand how print works (in English: left-to-right on a page, front-to-back in a book, etc.)^{xxvi} They are absorbing brand-new vocabulary (in context) from the song or story, building comprehension^{xxvii} and plot-prediction skills—and even, if the song is rhyming, predicting rhyme scheme as well. They're recognizing the value of expressiveness as the teacher's face moves to boost the meaning of the story and her voice rises and falls in pitch and volume. The children are, quite simply, learning that language—whether written/read as symbols or spoken/heard as sound—has meaning and value . . . the most basic understanding that can be tied by research to reading success.^{xxviii}

What You Can Do at Home

- **What Comes Next?** Sing the first line of a familiar song. Have your child sing the next line. Continue taking turns, perhaps even enlisting the participation of other members of the family. Take turns starting a new song. This activity not only builds verbal memory, but also develops listening skills and concentration.
- **Just for Us.** Make your own language! Take a familiar song and insert new words you've made up to replace the original ones (i.e., I'm a little *ablatt*, short and *miggle*, here is my handle and here is my *riggle*. . .). Give it a try and then, together, invent a gesture for each word and try it again. You'll be amazed at how well the gestures help you remember the meanings of your new words.

Developmental Milestones: Comprehension

By the time your child enters kindergarten, he or she will probably be able to^{xxix}:

- Point to individual words on the page of a book.
- Understand that sentences written in English go from left to right.
- Identify and write some alphabet letters, maybe representing some spoken sounds with letters.
- Choose books on his or her own, sometimes to get information.
- Anticipate what comes next in a patterned story (*Brown Bear, Brown Bear, What Do You See?* by Bill Martin, Jr.).
- Retell a favorite story including many details (e.g., “The wolf blew down the house because...”)

YOU + KINDERMUSIK = ALL THE RIGHT STUFF

If there’s one thing all the recent research proves without a doubt, it’s that *you* are the biggest factor in determining the quality of your child’s interest in, experiences with, and success with reading. Reading to your child, singing with your child, and talking with your child—in other words, surrounding your child with words of all kinds—are the best, easiest, and most fun ways to prepare him or her for a lifetime of reading.

Another thing is clear, though: the kind of learning your child does in Kindermusik—seeing the inner workings of language as it divides into sounds and syllables; engaging in active, focused listening exercises; building both vocabulary comprehension and expressed vocabulary; and comfortably exploring the joys of spoken and sung exploration and expression—has been proven repeatedly and convincingly to be the kind of learning that is specifically linked to success in school.

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